

# Figure 10.10

Figure 10.10 illustrates the process of a cell dividing into two daughter cells. The diagram shows a parent cell on the left, which undergoes mitosis. The chromosomes are visible as dark structures within the nucleus. The cell membrane and cell wall are shown as thin lines. The process is shown in several stages: the parent cell, the cell elongating, the chromosomes moving apart, and the cell pinching to form two daughter cells. The daughter cells are shown on the right, each with its own nucleus and chromosomes.

Figure 10.10: A diagram illustrating the process of binary fission in a prokaryotic cell. The parent cell is shown on the left, and the two daughter cells are shown on the right.



Binary fission is a form of asexual reproduction in which a single parent cell divides into two daughter cells. The parent cell first replicates its DNA, and then the two copies of DNA are separated. The cell membrane and cell wall then pinch inward to form two daughter cells. Binary fission is common in prokaryotic organisms, such as bacteria and archaea.